Examination of Estimates of Expenditure 2013-14

Reply Serial No.

ENB056

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Question Serial No.

1773

Head: 42 Electrical and Mechanical Services Department

Subhead (No. & title):

Programme: (3) Energy Efficiency and Conservation, and Alternative Energy

Controlling Officer: Director of Electrical and Mechanical Services

Director of Bureau: Secretary for the Environment

Question:

For the renewable energy projects undertaken for the Government and public bodies, please provide information in accordance with the format below

	Government Department/ Public Body	Buildings/ Facilities Involved	Electricity and cost saving	Reduction in carbon emission
2010				
2011				
2012				

Asked by: Hon. MO, Claudia

Reply:

The renewable energy installations funded by the resources allocated to the Electrical and Mechanical Services Department (EMSD) in 2010 and 2011 are shown in the table below.

Year	Government Department/ Public Body	Buildings/ Facilities Involved	Electricity generated and cost saving # per annum	Reduction in carbon emission per annum
2010	Education Bureau	Shau Kei Wan Government Secondary School; Chiu Lut Sau Memorial Secondary School; and Yuen Long Government Primary School	9 700 kWh and about $9,700	About 6 800 kg
	Leisure and Cultural Services Department	Lai Chi Kok Park; Middle Road Children's Playground; Tsuen Wan Jockey Club Tak Wah Park; and Tai Po Yuen Chau Tsai Park		
2011	Education Bureau	South Yuen Long Government Primary School	1 500 kWh and about $1,500	About 1 000 kg

Apart from the above projects, there are also renewable energy installations funded by resources allocated to other departments for individual capital projects. Examples of these installations are photovoltaic system at the Chemical Waste Treatment Centre in Tsing Yi, solar water heating system at Castle Peak Hospital, and photovoltaic system and small scale wind turbine system at Sing Yin Secondary School. Separate resources under EMSD for implementation of such renewable energy projects are not required in 2012.

For calculation of the cost saving, it is assumed that the average electricity tariff is $1 per kWh.

Name in block letters: CHAN Fan

Post Title: Director of Electrical and Mechanical Services

Date: 2.4.2013

Supplementary Notes for ENB056 [SFCQ-1773]

1. Adoption of **renewable energy** technology in the new public works projects and retrofitting projects is already a standing policy within the government now.

2. In 2005, the Government issued a technical circular on "Adoption of Energy Efficient Features and Renewable Energy Technologies in Government Projects and Installations", requiring government departments to consider the adoption of RE technologies in all new government buildings and major retrofitting projects in existing Government buildings. The technical circular also provides guidance on the standards for adopting solar water heating, photovoltaic, wind turbine and biogas technologies in Government projects and installations.

3. DEVB and ENB promulgated a comprehensive target-based green performance framework for new and existing Government buildings in April 2009, which sets targets in various green building aspects. On RE, all new schools and educational buildings without air-conditioning should aim to have at least 0.5% of their electricity consumption to be provided by RE, where technically and financially viable. Other Government buildings should also incorporate RE technologies as far as reasonably practicable.

4. [Just for internal reference only: All the renewable energy projects undertaken by EMSD were funded under $350M EMSTF Special Dividends of which special approval had been sought from FSTB to implement renewable projects for public demonstration purpose. Besides this special arrangement, no RE project was approved under the normal RAE bid for CNW projects by FSTB so far because the RE installations could not have a payback period commensurable to those of EE projects (less than 12 years)]

5. Energy saving of 1 million kWh is equivalent to a reduction of 700 tonnes carbon dioxide emission.